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TITLE:

PRODUCTION METHOD FOR POLISHING

COMPOSITION

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ABSTRACT:

PROBLEM TO BE SOLVED: To provide a method for producing a polishing

composition excellent in dispersion stability and containing agglomerate

particles in a small amount.

SOLUTION: In step 1-1, the pH of ultrapure water is adjusted to 1.0-2.7;

then, a fumed silica powder with a specific surface area of 50-200 m2/g is

charged into the ultrapure water until the initial silica concentration reaches

46-54 wt.%, while shearing force is being applied by a high-shear dispersion

apparatus; and shearing force is applied for 1-5 hr by the high-shear

dispersion apparatus. In step 1-2, a small amount of ultrapure water is added

to the resultant silica dispersion to give it silica concentration of 45-53

wt.%; and shearing force is applied for 10-40 min. In step 1-3, ultrapure water

is added to the silica dispersion to give it silica concentration of 33-44 wt.%

and shearing force is applied for 0.5-4 hr. In step 2-1, the silica dispension

is added to an aqueous basic substance solution which is prepared

so that when mixed with the silica dispersion, it gives a polishing composition with a pH of 8-12 and silica concentration of 10-30 wt.%.

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